This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

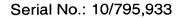
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.





Gln Arg Leu Pro Arg Met Gln Glu Asp Ser Pro Leu Gly Gly Gly 1 1 CAG AGG TTG CCC CGG ATG CAG GAG GAT TCC CCC TTG GGA GGA GGC 16 Ser Ser Gly Glu Asp Asp Pro Leu Gly Glu Glu Asp Leu Pro Ser 46 TCT TCT GGG GAA GAT GAC CCA CTG GGC GAG GAG GAT CTG CCC AGT 31 Glu Glu Asp Ser Pro Arg Glu Glu Asp Pro Pro Gly Glu Glu Asp 91 GAA GAG GAT TCA CCC AGA GAG GAG GAT CCA CCC GGA GAG GAT 46 Leu Pro Gly Glu Glu Asp Leu Pro Gly Glu Glu Asp Leu Pro Glu 136 CTA CCT GGA GAG GAG GAT CTA CCT GGA GAG GAG GAT CTA CCT GAA 61 Val Lys Pro Lys Ser Glu Glu Glu Gly Ser Leu Lys Leu Glu Asp 181 GTT AAG CCT AAA TCA GAA GAA GAG GGC TCC CTG AAG TTA GAG GAT 76 Leu Pro Thr Val Glu Ala Pro Gly Asp Pro Gln Glu Pro Gln Asn 226 CTA CCT ACT GTT GAG GCT CCT GGA GAT CCT CAA GAA CCC CAG AAT 91 Asn Ala His Arg Asp Lys Glu Gly Asp Asp Gln Ser His Trp Arg 271 AAT GCC CAC AGG GAC AAA GAA GGG GAT GAC CAG AGT CAT TGG CGC 106 Tyr Gly Gly Asp Pro Pro Trp Pro Arg Val Ser Pro Ala Cys Ala TAT GGA GGC GAC CCG CCC TGG CCC CGG GTG TCC CCA GCC TGC GCG 316 121 Gly Arg Phe Gln Ser Pro Val Asp Ile Arg Pro Gln Leu Ala Ala 361 GGC CGC TTC CAG TCC CCG GTG GAT ATC CGC CCC CAG CTC GCC GCC 136 Phe Cys Pro Ala Leu Arg Pro Leu Glu Leu Leu Gly Phe Gln Leu 406 TTC TGC CCG GCC CTG CGC CCC CTG GAA CTC CTG GGC TTC CAG CTC 151 Pro Pro Leu Pro Glu Leu Arg Leu Arg Asn Asn Gly His Ser Val 451 CCG CCG CTC CCA GAA CTG CGC CTG CGC AAC AAT GGC CAC AGT GTG 166 Gln Leu Thr Leu Pro Pro Gly Leu Glu Met Ala Leu Gly Pro Gly 496 CAA CTG ACC CTG CCT CCT GGG CTA GAG ATG GCT CTG GGT CCC GGG 191 Arg Glu Tyr Arg Ala Leu Gln Leu His Leu His Trp Gly Ala Ala 541 CGG GAG TAC CGG GCT CTG CAG CTG CAT CTG CAC TGG GGG GCT GCA 196 Gly Arg Pro Gly Ser Glu His Thr Val Glu Gly His Arg Phe Pro 586 GGT CGT CCG GGC TCG GAG CAC ACT GTG GAA GGC CAC CGT TTC CCT 211 Ala Glu Ile His Val Val His Leu Ser Thr Ala Phe Ala Arg Val GCC GAG ATC CAC GTG GTT CAC CTC AGC ACC GCC TTT GCC AGA GTT 631

226 676	Asp GAC	G1u GAG	Ala GCC	Leu TTG	G1y GGG	Arg CGC	Pro CCG	Gly GGA	GT y GGC	Leu CTG	Ala GCC	Val GTG	Leu TTG	Ala GCC	Ala GCC
241 721	Phe	Leu CTG	G1u GAG	G1u GAG	Gly GGC	Pro CCG	G1u GAA	G1u GAA	Asn AAC	Ser AGT	Ala GCC	Tyr TAT	G1u GAG	G1n CAG	Leu TTG
256 766	Leu CTG	Ser TCT	Arg CGC	Leu TTG	Glu GAA	Glu GAA	Ile ATC	Ala GCT	G1u GAG	G1u GAA	Gly GGC	Ser TCA	G1u GAG	Thr ACT	Gln CAG
271 811	Va1	Pro	Gly	Leu	Asp	Ile	Ser	Ala	Leu	Leu CTG	Pro	Ser	Asp	Phe	Ser
286 856	Arg	Tyr	Phe	Gln	Tyr	Glu	G1 y	Ser	Leu	Thr ACT	Thr	Pro	Pro	Cvs	Ala
301 901	G1n	Gly	Val	Ile	Trp	Ťhr	Val	Phe	Asn	Gln CAG	Thr	Val	Met	Leu	Ser
316 946	Ala	Lys	Gln	Leu	His	Thr	Leu	Ser	Asp	Thr ACC	Leu	Trp	Gly	Pro	Gly
331 991	Asp	Ser	Arg	Leu	Gln	Leu	Asn	Phe	Arg	Ala GCG	Thr	Gln	Pro	Leu	Asn
346 1046	Gly	Arg	Val	Ile	Glu	Ala	Ser	Phe	Pro	Ala GCT	Gly	Val	Asp	Ser	Ser
361 1081	Pro	Arg	Ala	Ala	Glu	Pro	Val	Gln	Leu	Asn AAT	Ser	Cys	Leu	Ala	Ala
376 1126	Gly	Asp	Ile	Leu	Ala	Leu	Val	Phe	Gly	Leu CTC	Leu	Phe	Ala	Val	Thr
391 1171	Ser	Val	Ala	Phe	Leu	Val	Gln	Met	Arg	Arg AGG	Gln	His	Arg	Arg	G1y
406 1216	Thr	Lys	Gly	Gly	Val	Ser	Tyr	Arg	Pro	Ala GCA	Glu	Val	Ala	Glu	Thr
421 1261	Gly	Ala								TGT					
1306										CCT					
1351	CCA	СТТ	ССТ	тт	AAC	TGC	CAA	GAA	ATT	П	TAA	AAT	AAA	TAT	TTA
1396	TAA	Т			F	= <i>IC</i>	3	. 1 <i>l</i>	3			÷			

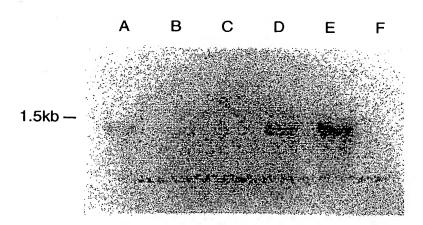


FIG._4

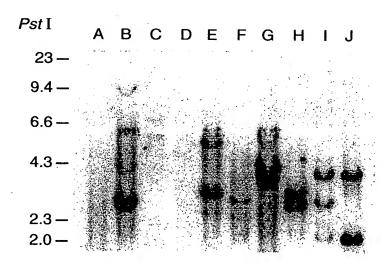
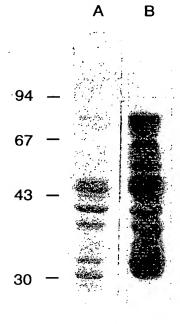


FIG._5

3/26



14 -

FIG._2

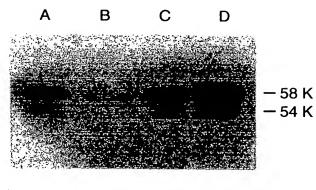
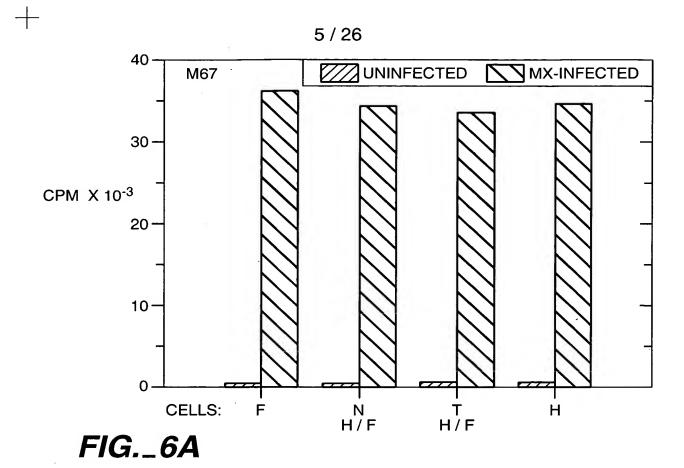
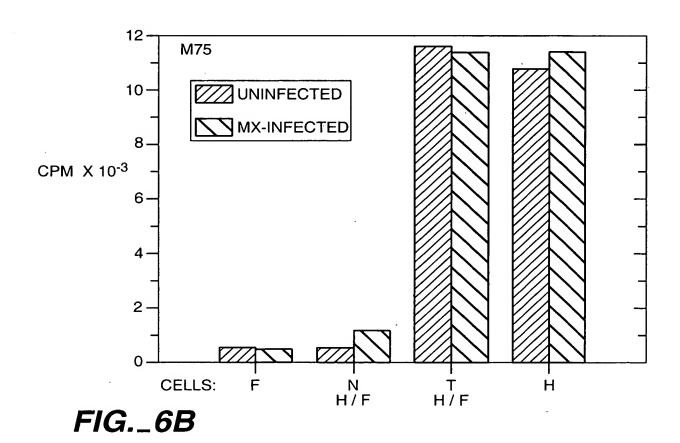


FIG._3





6/26

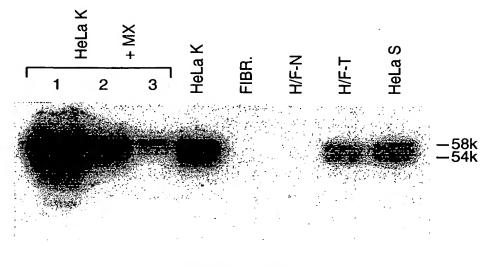


FIG._7

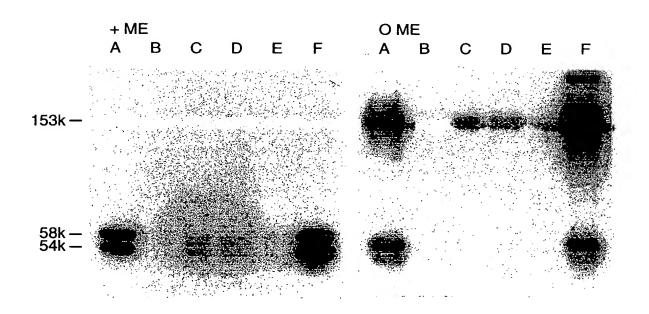
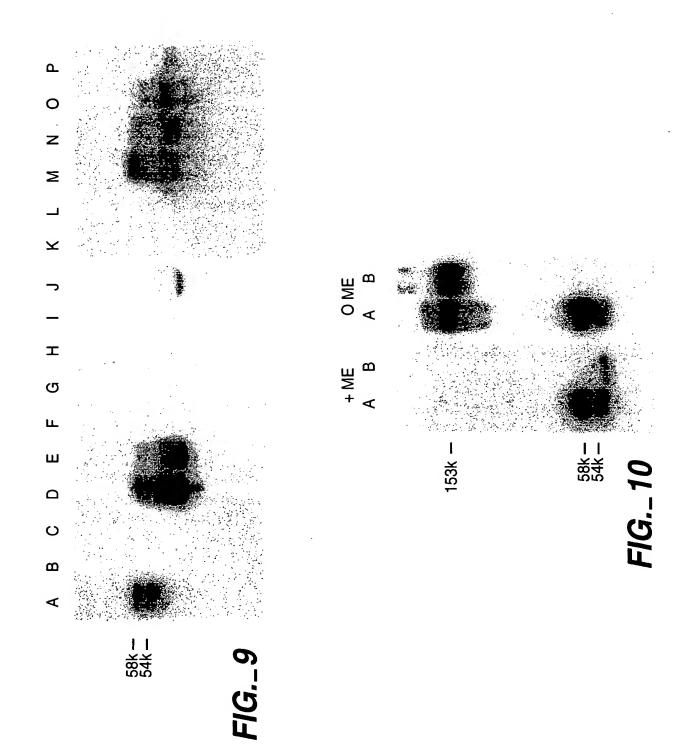
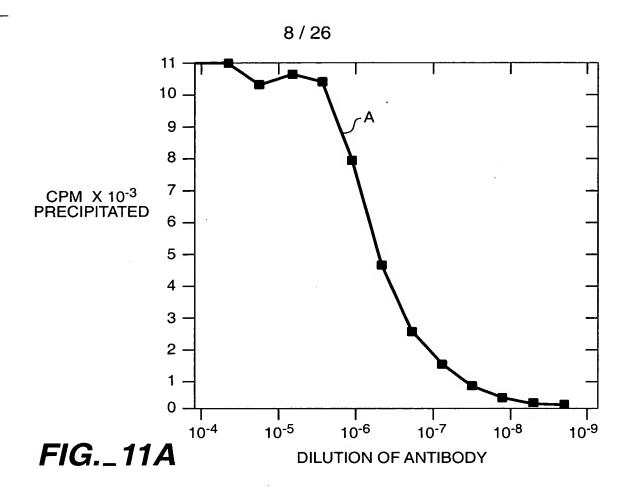
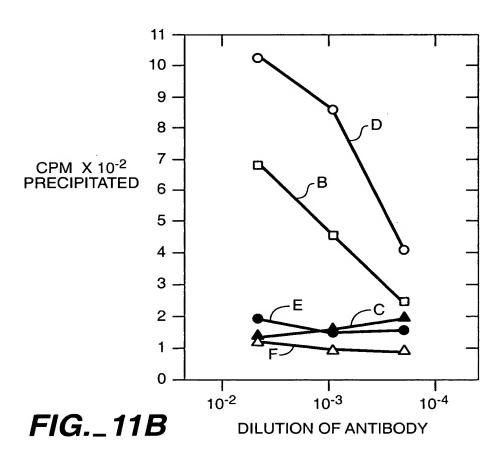
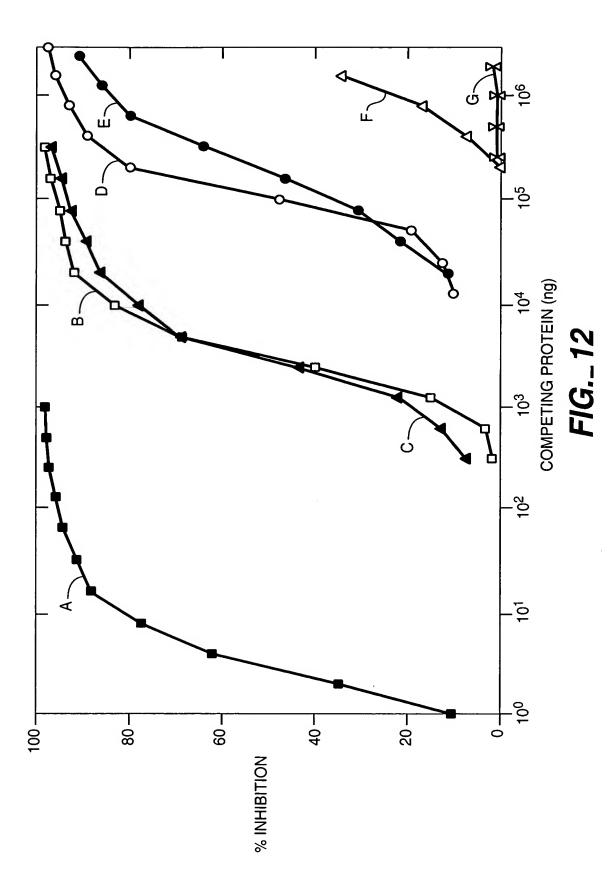


FIG._8









10/26

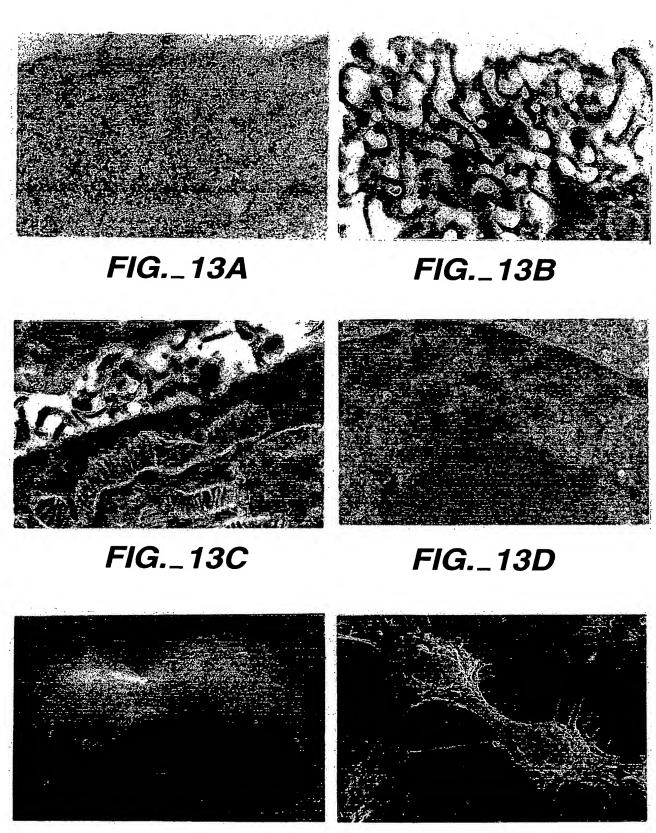


FIG._13E

FIG._13F

11 / 26

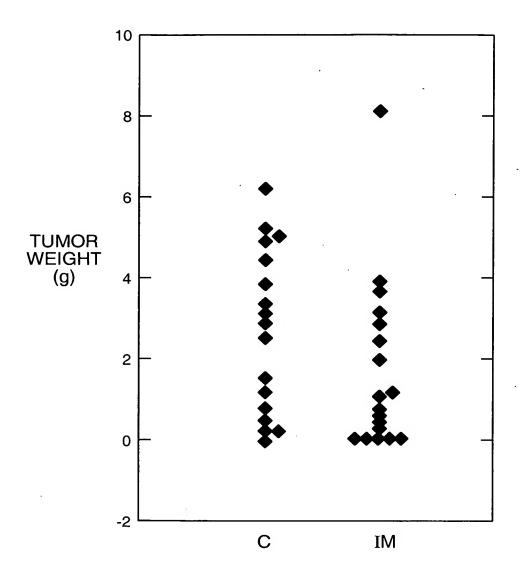


FIG._14

+-

										'
12 48	28 96	44 144	60 192	76 240	92 288	108 336	124 384	140 432	156 480	172 528
CTG	S	CAG	L	D GAT	e Gag	CTG	GAA	H	၁ ၁၅	A
PCCT	L CTG	M Atg	CCA	E GAG	G GGA	နှ TCC	CAA	S AGT	₽ GCC	A GCC
CIC	L	R CGG	D GAC	e Gag	PCCT	ი მმ <i>C</i>	PCCT	Q CAG	P CCA	CTC
TGG	L	CCC	D GAT	r Aga	L CTA	e Gag	D GAT	DGAC	S	O CAG
PCCC	CAA	TTG	GAA	ಧಿದ್ದ	D GAT	E GAA	G GGA	D GAT	V GTG	P CCC
SAGC	V GTG	r Agg	ი მმმ	STCA	e Gag	E	PCCT	ტ ტტტ	R CGG	R CGC
CCC	T ACT	Q CAG	STCT	D GAT	E GAG	S TCA	A GCT	E Gaa	CCC	I ATC
c TGC	CIC	P CCC	STCT	e Gag	G GGA	A A A	E GAG	A A A	W TGG	D GAT
L	ဗ္ဗဗ္ဗ	H CAT	ტ ტე	E GAA	CCT	CCT	V GTT	D GAC	CCC	v GTG
P CCC	P CCA	V GTC	G GGA	S AGT	L	K AAG	ACT	r Agg	P CCG	P CCG
A GCT	A GCT	PCCT	G GGA	GGG	D GAT	V GTT	P CCT	H	DGAC	s TCC
M ATG	PCCT	MATG	L TTG	L CTG	E GAG	E GAA	L	A GCC	ဗ္ဗဗ္ဗ	CAG
၁၅၁	₽ GCC	L CTG	GGG	DGAT	e Gag	PCCT	D GAT	N AAT	G GGA	F TTC
AGC	PCCG	CTT	S TCC	E GAG	6 66 A	L	e Gag	N AAT	Y TAT	R CGC
GTC	IATC	L CTG	DGAT	E GAG	P CCC	D GAT	L TTA	Q CAG	R GGC	ဗ္ဗဗ္ဗ
ACA	L	CTG	e Gag	စ ၁၅၅	CCA	e Gag	K AAG	GCC CCC	T G G	₽ GCG
ਜਜ	13 49	29 97	45 145	61 193	77	93 289	109 337	125 385	141 433	157 481

										1
188 576	204 624	220 672	236 720	252 768	268 816	284 864	300 912	316 960	332 1008	348 1056
P	r Cig	Y TAC	ဗ ဗဗ္ဗ	V GTG	ი ცე	e gaa	A GCT	CIC	T ACT	T ACA
CIC	CAA CAA	E GAG	P CCG	H	ი მიმ	P CCG	I ATC	A GCA	L	Q CAG
Q CAG	∨ GTG	R CGG	r CGT	IATC	L TTG	စ ၁၁	E GAA	S TCT	S TCT	AAC
F	S AGT	ი მმმ	G GGT	E	₽ GCC	E	E GAA	I ATA	ი გგგ	F TTT
စ ၁၅	H	CCC	A GCA	₽	E GAG	e gag	L TTG	GAC	e gag	v GTG
L CTG	စ ည	G GGT	A GCT	PCCT	GAC	L	r CGC	L	Y TAT	TACT
CIC	N AAT	L CTG	ი მემ	F	V GTT	F TTT	S TCT	G GGA	CAA	W TGG
GAA	N AAC	A GCT	¥ TGG	R CGT	R AGA	₽	L	PCCA	F	I ATC
CTG	8 CGC	M ATG	H	H	₽	₽	L TTG	v GTC	Y TAC	v GTC
CCC	L CTG	e Gag	L CTG	ရ ၁၈	F	L TTG	Q CAG	O CAG	မှ ပ	G GGT
ဗ ဗ	R CGC	L	H	GAA	₽	V GTG	E GAG	T ACT	S AGC	Q CAG
L CTG	CTG	ტ ტტ	L CTG	V GTG	T ACC	₽	Y TAT	E	F	₽ GCC
₽	GAA	PCCT	Q CAG	TACT	S AGC	L	₽ CC	S TCA	D GAC	C TGT
P CCG	P CCA	PCCT	L CTG	CAC	CIC	ဗ ဗဗ	S AGT	9 99C	S TCT	P CCC
ာ ဦင်	CTC	L	A GCT	E GAG	H	G GGA	N AAC	E GAA	PCCC	P CCG
FTC	PCCG	T ACC	R CGG	S TCG	V GTT	P	GAA	E GAG	L	ACA
173 529	189 577	205 625	221 673	237 721	253 769	269 817	285 865	301 913	317 961	333 1009

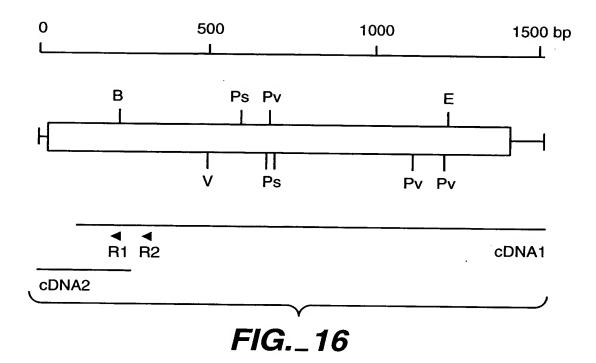
-4	1	,	9	4
	4	/	2	O

									L	-
364 1104	380 1152	396 1200	412 1248	428 1296	444 1344	460 1392	1440	1488	1522	
T G G	PCCT	S AGC	A GCT	S AGC	A A A A	* TAG	້ ອ ອອ	AAC		
L CTG	Q CAG	D GAC	A GCT	T ACC	T ACC	₽ GCC	TGA	TTT		
ACC	T ACG	∨ GTG	L CTG	STC	G GGA	G GGA	ATC	CCT		
GAC	A GCG	G GGA	ာ အီင	A GCT	R AGG	T ACT	၁၅၅	CTT		
S TCT	R CGA	A GCT	S	F TTT	R AGA	E	AGA	CCA	E	
CTC	F	CCT	N AAT	CTT	H	₽ ೧೭೮	သည	ATG	TAA	
ACC	NAAC	F TTC	L CTG	CTC	Q	v GTA	CCA	ATT	TTA	
CAC	L	S TCC	Q	ဗ ဗ	R AGG	E	AAG	CTC	TAT	
CIC	QCAG	₽	V GTC	F	R AGA	A GCA	GAG	CTG	AAA	
Q CAG	CIA	E	P CCA	V GTT	MATG	PCCA	TGT	GTC	AAT	
K AAG	R CGG	I ATT	E GAG	CTG	Q CAG	CGC	GAA	CCT	TAA	
A GCT	S TCT	V GTG	A GCT	₽	V GTG	Y TAC	GGA	TGT	TTT	
SAGT	GAC	R CGA	A GCT	L	L	S AGC	CTT	AAC	ATT	
CIG	G GGT	ი მცც	R CGG	I ATC	F	v GTG	GAT	GGT	GAA	
M ATG	PCCT	N AAT	PCCT	DGAC	₽ GCG	G GGT	CTG	ညည	CAA	
∨ GTG	G GGA	L TTG	SAGT	G GGT	V GTC	ტ ტტტ	AGG	GGA	TGC	
349 ⁻ 1057	365 1105	381 1153	397 1201	413 1249	429 1297	445 1345	1393	1441	1489	

FIG._15

+-

15/26



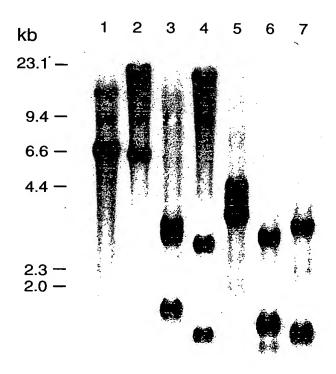
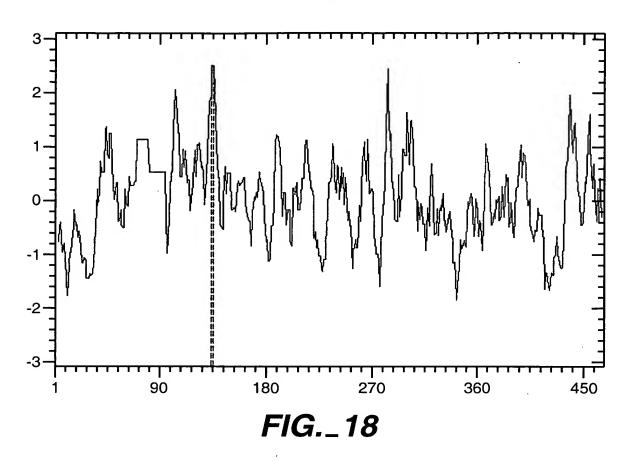


FIG._17



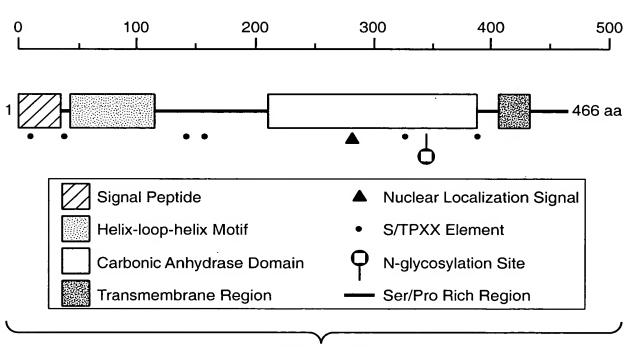
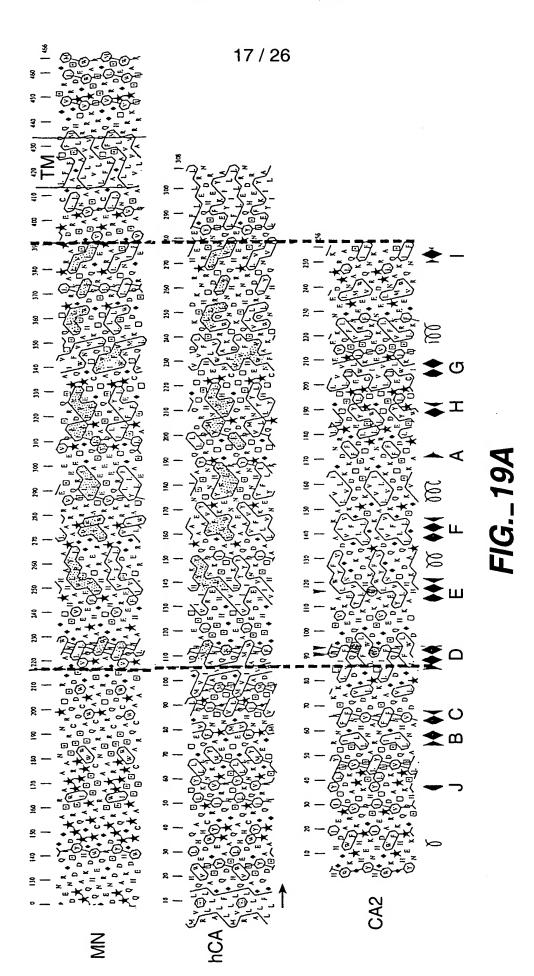
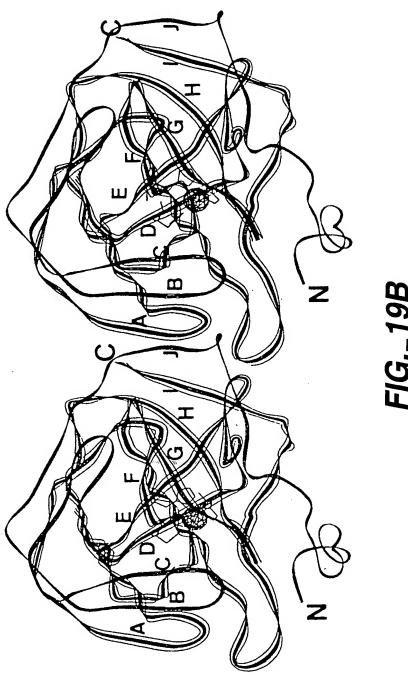
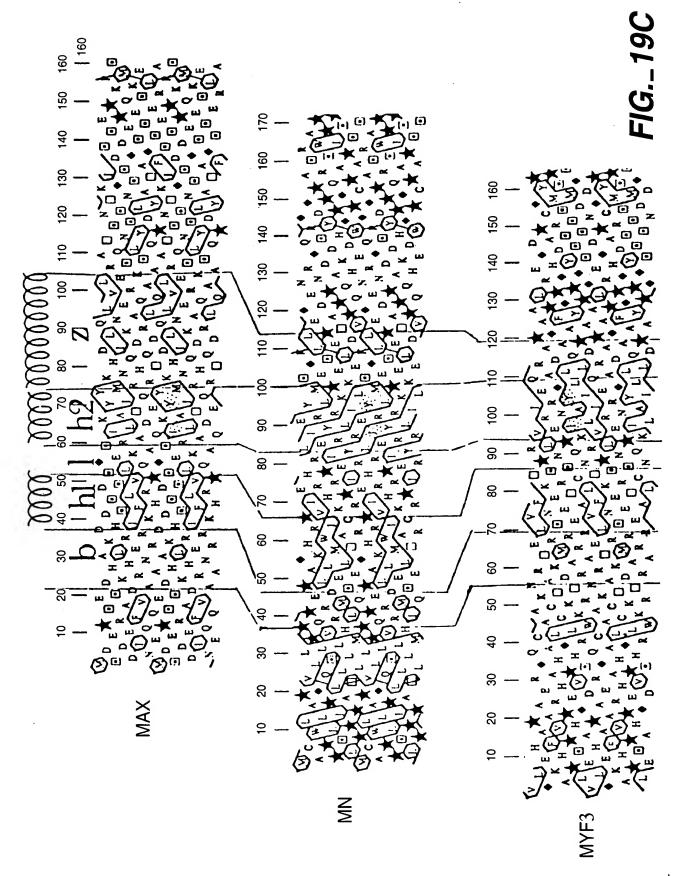


FIG._19D

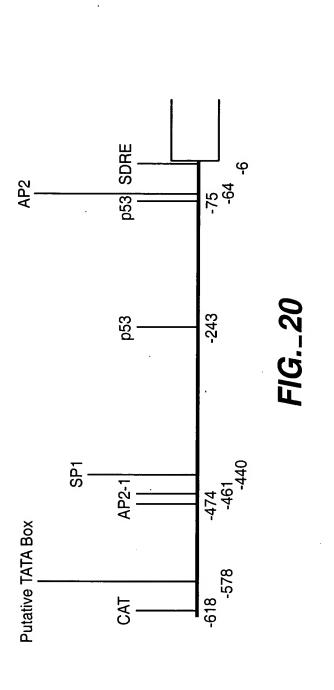


+





20 / 26



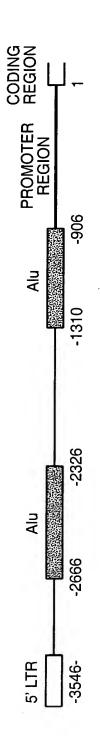
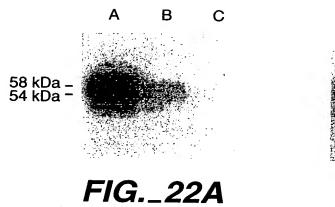


FIG._21



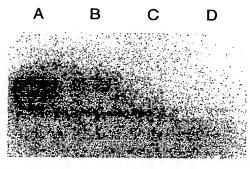


FIG._22B

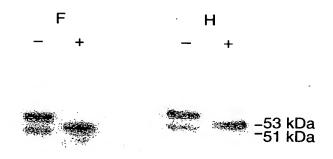


FIG._22C

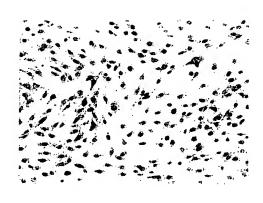


FIG._23A



FIG._23B

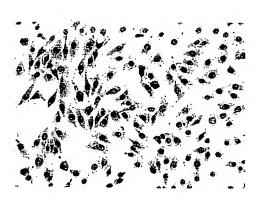


FIG._23C

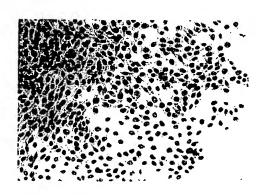


FIG._23D

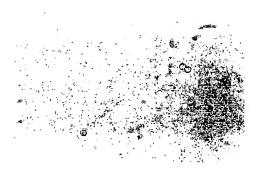


FIG._23E

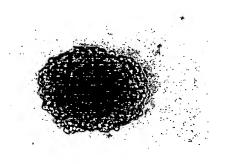
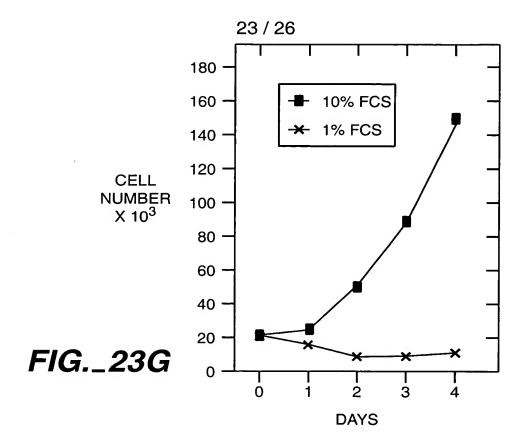
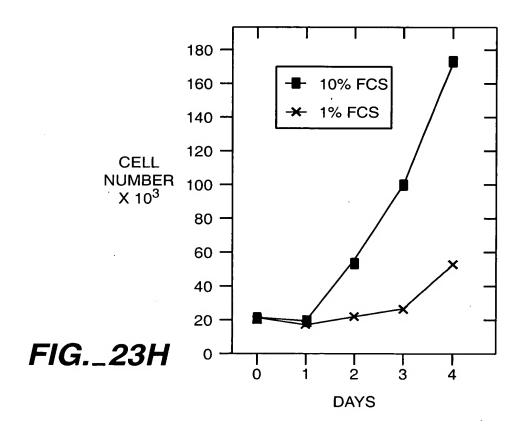
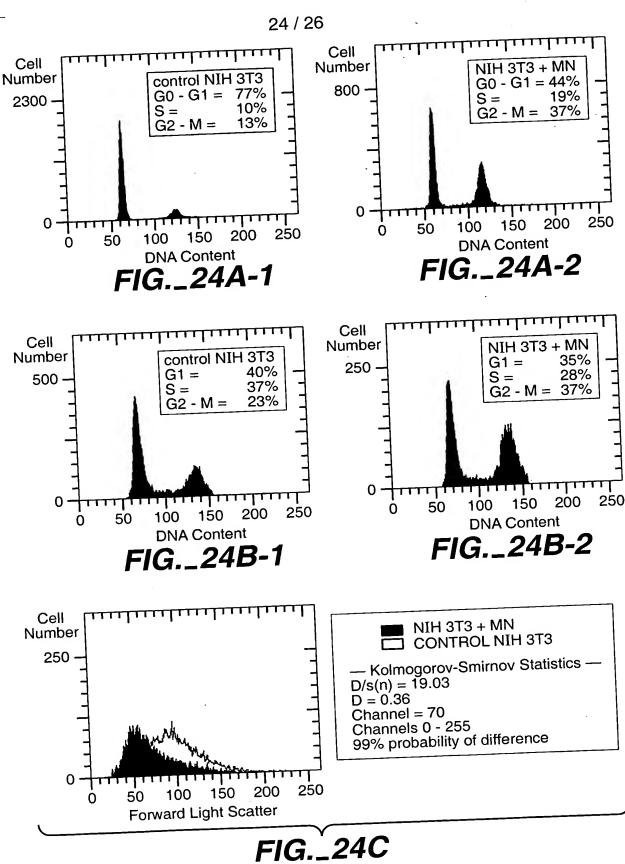


FIG._23F







25 / 26

SQ Sequence 5052 BP: 1201 A; 1249 C; 1201 G; 1399 T.

5Q Sequence 3002 Bit 12011,
GGATCCTGTT GACTCGTGAC CTTACCCCCA ACCCTGTGCT CTCTGAAACA TGAGCTGTGT
TO THE TAXABLE PROPERTY OF THE
TOTAL ACTION OF A CONTROL OF A
THE TARGETT CONCOUNTER
TO THE CONTROL OF THE PROPERTY
TANA AAAATAAT TTAAAAAAA AATACAAAAA MMAAAAAAAA AATACAAAAA
TAAATGAATA GCIAI 1931A 121001111
CONTROL CONTROL CONTROL CATAGRAM ATTOCKEN
TO THE TOTAL A CAMPUTACIC CTTACATGAA GCIIGAACCI MOINE
THE TOTAL CONTROL OF THE CONTROL OF THE CALL CONTROL OF THE CONTROL OF THE CALL CONTRO
TO THE TOTAL AND
TO COUNTY OF THE CACHA APP GCTTACCTAA GACCCTAAGC CCITTACCTAAGC
THE COMMENT AND THE COMMENT AND THE COMMENTS OF THE COMMENTS O
TOTAL TOTAL TOTAL TOTAL ACCORDED TO ACCORD
TOTAL
THE PROPERTY OF THE CONTROL OF THE C
CONTAIN CACCECETTT CACCETTA GCCAGAAIGG 1010011101
TOTAL COOK CONCOCCONT CCAAAGTTCT GGGATTACAG GTGTGAGCCA
AAGTAAAAAT ATGTCTTGTA AGCIGGIALO
TATAGGICI TITOLOGICA TATAGGICA TATAGGICA
CONCERNMENT CONCERNMENT CATTACATT TICICICIE MILLONIA
CACTURE CACTURE CACTURE CACTURE CACTURE CACACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG
TO STATE OF THE ST
TOTAL ACACCOATCA TTCAGGTGAA TCTGACACTA AGAAACTCCC CIIICOTTAGAAACTCCC
COMORGA CAME COMONATA GCCTTTTCCT TIGACAGCCI CICIO
ACTATTTTC TTAAGCAAGA TATGCTAAAG TTTTGTGAGC CTTTTTCCAG ACTATTTTC
TOTAL TOTAL MARKET ACATATAATG TOTGCATGTT TOCATATTTC AGGARIGITI
TO THE TOTAL CAMENTAGE CONTROL TO THE TOTAL CONTROL OF THE TOTAL CONTROL
TO THE PROPERTY OF THE PROPERT
CAAMCTCAAA CTCTTCAGTT GGTGTGTGC CCIMCTTCAGTT
THE COURT COURT OF THE COURT AND A AGTATGATE TIGHT AND ALGER AND A
TOTAL
TO THE THEORY WITH A CALLANT CAATAATATA ATCCCTIAAA COM
TO COCOTO ACACCTOTA TCCCAGCACT TIGGGIGGC MICCIONA
CHECK AND TO A TO THE CONTROL OF THE CONTR
as acom mmccccrcac TCACTAGATT GIGAGCICCI Golden
TOTAL
TO THE STREET AND CONTROL TO CARCACTURE GET CARCACTURE CONTROL
CCCAGGCCAG AGTGCAATGG TACAGTGTOTO OF ACCATCACC AGTGCACATGC CATTACACCT ACCATCATCC CATTTCAGCC TCCTGAGTAG CTGGGACTAC AGGCACATGC CATTACACCT
•••

		m. cm. c. c. c	1 GGGTTTTGGG	a. mammaaaa	0000m00m0m
		TAGTAGAGAC			
		ATCCACCCAC			
		GTCCATAGCC			
		TAAATAGCAT			
TGGTAAAAGG	TTTGGAGAAA	AAAATAATAG	TTTAATTTGG	CTAGAGTATG	AGGGAGAGTA
		GTCTCTTGGG	·		
GTACACAATG	TGATATCGTG	GCAGGCAGTG	GGGAGCCAAT	GAAGGCTTTT	GAGCAGGAGA
GTAATGTGTT	GAAAAATAAA	TATAGGTTAA	ACCTATCAGA	GCCCCTCTGA	CACATACACT
TGCTTTTCAT	TCAAGCTCAA	GTTTGTCTCC	CACATACCCA	TTACTTAACT	CACCCTCGGG
CTCCCCTAGC	AGCCTGCCCT	ACCTCTTTAC	CTGCTTCCTG	GTGGAGTCAG	GGATGTATAC
ATGAGCTGCT	TTCCCTCTCA	GCCAGAGACA	TGGGGGGCCC	CAGCTCCCCT	GCCTTTCCCC
TTCTGTGCCT	GGAGCTGGGA	AGCAGGCCAG	GGTTAGCTGA	GGCTGGCTGG	CAAGCAGCTG
GGTGGTGCCA	GGGAGAGCCT	GCATAGTGCC	AGGTGGTGCC	TTGGGTTCCA	AGCTAGTCCA
TGGCCCCGAT	AACCTTCTGC	CTGTGCACAC	ACCTGCCCCT	CACTCCACCC	CCATCCTAGC
TTTGGTATGG	GGGAGAGGC	ACAGGGCCAG	ACAAACCTGT	GAGACTTTGG	${\tt CTCCATCTCT}$
GCAAAAGGGC	GCTCTGTGAG	TCAGCCTGCT	CCCCTCCAGG	CTTGCTCCTC	CCCCACCCAG
CTCTCGTTTC	CAATGCACGT	ACAGCCCGTA	CACACCGTGT	GCTGGGACAC	CCCACAGTCA
GCGCATGGCT	CCCCTGTGCC	CCAGCCCCTG	GCTCCCTCTG	TTGATCCCGG	CCCCTGCTCC
AGGCCTCACT	GTGCAACTGC	TGCTGTCACT	GCTGCTTCTG	ATGCCTGTCC	ATCCCCAGAG
GTTGCCCCGG	ATGCAGGAGG	ATTCCCCCTT	GGAGGAGGCT	${\tt CTTCTGGGGA}$	AGATGACCCA
CTGGGCGAGG	AGGATCTGCC	CAGTGAAGAG	GATTCACCCA	GAGAGGAGGA	TCCACCCGGA
GAGGAGGATC	TACCTGGAGA	GGAGGATCTA	CCTGGAGAGG	AGGATCTACC	TGAAGTTAAT
GCCTAAATCA	GAAGAAGAGG	GCTCCCTGAA	GTTAGAGGAT	CTACCTACTG	TTGAGGCTCC
TGGAGATCCT	CAAGAACCCC	AGAATAATGC	CCACAGGGAC	AAAGAAGGGG	ATGACCAGAG
TCATTGGCGC	TATGGAGGCG	ACCCGCCTGG	CCCCGGGTGT	CCCCAGCCTG	CGCGGGCCGC
TTCCAGTCCC	CGGTGGATAT	CCGCCCCAG	CTCGCCGCCT	TCTGCCCGGC	CCTGCGCCCC
ÇTGGAACTCC	TGGGCTTCCA	GCTCCCGCCG	CTCCCAGAAC	$\mathbf{TGCGCCTGCA}$	GACAATGGCC
ACAGTGTGCA	ACTGACCCTG	CCTCCTGGGC	TAGAGATGGC	TCTGGGTCCC	GGGCGGGAGT
ACCGGCTCTG	CAGCTGCATC	TGCACTGGGG	GGCTGCAGGT	CGTCCGGGCT	CGGAGCACAC
TGTGGAAGGC	CACCGTTTCC	CTGCCGAGAT	CCACGTGGTT	CACCTCAGCA	CCGCCTTTGC
CAGAGTTGAC	GAGGCCTTGG	GGCGCCCGGG	AGGCCTGGCC	GTGTTGGCGC	CTTTCTGGAG
GAGGGCCCGG	AAGAAAACAG	TGTCCTATGA	GCAGTTGCTG	TCTCGCTTGG	AAGAAATCGC
TGAGGAAGGC	TCAGAGACTC	AGGTCCCAGG	ACTGGACATA	TCTGCACTCC	TGCCCTCTGA
CTTCAGCCGC	TACTTCCAAT	ATGAGGGGTC	TCTGACTACA	CCGCCCTGTG	CCCAGGGTGT
CATCTGGACT	GTGTTTAACC	AGACAGTGAT	GCTGAGTGCT	AAGCAGCTCC	ACACCCTCTC
TGACACCCTG	TGGGGACCTG	GTGACTCTCG	GCTACAGCTG	AACTTCCGAG	CGACGCAGCC
TTTGAATGGG	CGAGTGATTG	AGGCCTCCTT	CCCTGCTGGA	GTGGACAGCA	GTCCTCGGGC
TGCTGAGCCA	GTCCAGCTGA	ATTCCTGCCT	GGCTGCTGGT	GACATCCTAG	CCCTGGTTTT
TGGCCTCCTT	TTTGCTGTCA	CCAGCGTCGC	GTTCCTTGTG	CAGATGAGAA	GGCAGCACAG
AAGGGGAACC	AAAGGGGGTG	TGAGCGTACC	GCCCAGCAGA	GGTAGCCGAG	ACTGGAGCCT
AGAGGCTGGA	TCTTGGAGAA	TGTGAGAAGC	CAGCCAGAGG	CATCTGAGGG	GGAGCCGGTA
ACTGTCCTGT	CCTGCTCATT	ATGCCACTTC	CTTTTAACTG	CCAAGAAATT	TTTTAAAATA
AATATTTATA	AT				